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NOTICE OF ALLOWANCE AND FEE(S) DUE

24956

7590

12/22/2008

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314 EXAMINER

HA, NATHAN W

ART UNIT PAPER NUMBER

2814

DATE MAILED: 12/22/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/592,948	09/15/2006	Motoo Suwa	REN-5410	8673

TITLE OF INVENTION: ELECTRONIC CIRCUIT, A SEMICONDUCTOR DEVICE AND A MOUNTING SUBSTRATE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notifica	ed below or directed oth	ng the Patent, advance o herwise in Block 1, by (a) specifying a new co	orresp	ondence address;	and/o	(b) indicating a separ	correspondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370				Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.				
ALEXANDRIA	A, VA 22314							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	ГOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/592,948	09/15/2006	•	Motoo Suwa				REN-5410	8673
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nonprovisional	NO	\$1510	\$300		\$0		\$1810	03/23/2009
EXAM	MINER	ART UNIT	CLASS-SUBCLASS		7			
HA, NA	THAN W	2814	257-700000					
1. Change of correspond CFR 1.363).	ence address or indicatio	on of "Fee Address" (37	2. For printing on to (1) the names of u	-			nevs 1	
Change of corresp	oondence address (or Cha B/122) attached.	ange of Correspondence	or agents OR, alternatively,					
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			registered attorney or agent) and the names of up to					
3. ASSIGNEE NAME A	AND RESIDENCE DATA	A TO BE PRINTED ON	I THE PATENT (print o	r type	e)			
PLEASE NOTE: Un	less an assignee is ident	tified below, no assignee pletion of this form is NO	data will appear on th	ne pat	tent. If an assign	ee is ic	lentified below, the do	cument has been filed for
(A) NAME OF ASSI	•	prediction of this form is two	(B) RESIDENCE: (C	•		COUNT	RY)	
Please check the appropr	riate assignee category or	r categories (will not be p	rinted on the natent):		Individual D Co	vroorati	on or other private gro	up entity 🖵 Government
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4a. The following fee(s) Issue Fee	are submitted:	41	b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed.					
☐ Publication Fee (No small entity discount permitted)			Payment by credit card. Form PTO-2038 is attached.					
Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).					
5. Change in Entity Sta	itus (from status indicate	d above)	o verpayment, to 2	ерев			(cherese un	emin copy of this form).
**	ns SMALL ENTITY state			_	_		ΓΙΤΥ status. See 37 CF	
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte ates Patent and Trademark	ed from anyone other the Office.	an th	e applicant; a regi	stered :	attorney or agent; or the	assignee or other party in
Authorized Signature					Date			
Authorized Signature Typed or printed name								
This collection of information is required by 37 CFR 1.311. The information			on is required to obtain	Or re	tain a benefit by t	he pub	ic which is to file (and	by the USPTO to process)
an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	ntiality is governed by 35 application form to the ions for reducing this bu Virginia 22313-1450. DO	o U.S.C. 122 and 37 CFR but USPTO. Time will vary rden, should be sent to the D NOT SEND FEES OR	7 depending upon the interpretation of the Chief Information OCOMPLETED FORMS	s estin ndivid fficer S TO	mated to take 12 rdual case. Any co c, U.S. Patent and THIS ADDRESS	minutes mment Traden S. SENI	to complete, including s on the amount of tim nark Office, U.S. Depa D TO: Commissioner for	by the USFTO to process) gathering, preparing, and the you require to complete thment of Commerce, P.O. or Patents, P.O. Box 1450,

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/592,948	09/15/2006	Motoo Suwa	REN-5410	8673		
24956 75	590 12/22/2008		EXAMINER			
MATTINGLY, S	STANGER, MALUR	HA, NATHAN W				
1800 DIAGONAL	ROAD	ART UNIT	PAPER NUMBER			
SUITE 370 ALEXANDRIA, V	/A 22314	2814 DATE MAILED: 12/22/200	8			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 196 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 196 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
	10/592,948	SUWA ET AL.		
Notice of Allowability	Examiner	Art Unit		
	Nathan W. Ha	2814		
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIP of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 9/10/08.	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	in this application. If not included nunication will be mailed in due cou	urse. THIS	
2. ☑ The allowed claim(s) is/are <u>1-5 and 29-36</u> .				
 Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	e been received. e been received in Applicati	on No	n from the	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.			
INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") mus	es reason(s) why the oath o		ICE OF	
(a) ☐ including changes required by the Notice of Draftspers		ew (PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1	.84(c)) should be written on	the drawings in the front (not the ba	ick) of	
each sheet. Replacement sheet(s) should be labeled as such in t 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MAT	ERIAL must be submitted. Not	e the	
 Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08),	6. ☐ Interview S Paper No 7. ☑ Examiner's	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowa	ınce	

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EXAMINER'S AMENDMENT

Election/Restrictions

1. This application is in condition for allowance except for the presence of claims 6-28 directed to invention non-elected without traverse. Accordingly, claims 6-28 have been cancelled.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the specification:

Replace the phrase "Description" with "Title of the Invention", on page 1, line one.

Replace the phrase "Disclose of the Invention" with "Summary of the Invention", on page 2, below the first paragraph.

Replace the current "ABSTRACT" with a new abstract in the next page.

In the claim:

Cancel claims 6-28.

Claims 1-5 and 29-36 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The primary reason for the indication of the allowability of the above claims is the inclusion therein, in combination as currently claimed as a whole, of the limitation of the electronic circuit including assembly lines of the second semiconductor device have

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made lengths thereof unequal for respective bits, and the unequal lengths of the mounting substrate lines have a relationship which offsets the unequal lengths of the assembly lines. This limitation is found in the above claims and is neither disclosed nor taught by the prior art of record, alone or in combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Ha whose telephone number is (571) 272-1707. The examiner can normally be reached on M-TH 8:00-7:00(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathan W. Ha/ Primary Examiner, Art Unit 2814 Application/Control Number: 10/592,948 Page 5

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ABSTRACT

An electronic circuit includes a first semiconductor device and a second semiconductor device on a mounting substrate. The mounting substrate lines have lengths which are made unequal for respective bits. Assembling lines which reach connecting electrodes of a semiconductor chip from the external terminals of the second semiconductor device have made lengths thereof unequal for respective bits. The unequal lengths of the mounting substrate lines have a relationship which offsets the unequal lengths of the assembling lines.